MassGIS Protected & Recreation OpenSpace Schema

Phase I. *Moving OpenSpace from Librarian coverage tiles to SDE GeoDatabase. Chapter 61 land has been explicitly separated from OpenSpace, but participates in the new "rules-based" topology. The new schema also utilizes domains for attribute validation.*

Geodatabase Summary

Feature Dataset OpenSpace	Feature Dataset containing the features classes and topology for OpenSpace.
Polygon feature class OPENSPACE_POLY	Polygons representing land considered to be protected or recreation OpenSpace.
Polygon feature class CHAPTER61_POLY	Polygons representing land participating in the Chapter 61 program with the local Assessor.
Line feature class OS_ARC	Arcs representing the boundary of all polygons (OS & Ch61).
Topology Feature OPENSPACE_Topology	Topology applied to all above Feature Classes.
Table OSNAMES	List of abbreviations used in OpenSpace.

Geodatabase:

\\sun420.env.state.ma.us\GISDATA.sde

Date generated:

Friday, June 11, 2004

Versions:

SDE.DEFAULT
└ SCOSTELLO.OS_DBA
   ├ <EDITOR1>.OS_EDITOR
   ├ <EDITOR2>.OS_EDITOR
   └ Etc…

Topology Feature — OPENSPACE_Topology — Rules implemented by feature dataset topology.

Feature Class	Rule	Feature Class
CHAPTER61_POLY	Must Not Overlap	
OPENSPACE_POLY	Must Not Overlap	
OPENSPACE_POLY	Must Not Overlap With	CHAPTER61_POLY
OPENSPACE_POLY	Boundary Must Be Covered By	OPENSPACE_ARC
CHAPTER61_POLY	Boundary Must Be Covered By	OPENSPACE_ARC
OPENSPACE_ARC	Must Not Overlap	
OPENSPACE_ARC	Must Be Single Part	
OPENSPACE_ARC	Must Not Have Dangles	
OPENSPACE_ARC	Must Not Self-Intersect	

Geodatabase Detail

Simple feature class CHAPTER61_POLY
Geometry: Polygon — Contains M values: No — Contains Z values: No

Feature class of all land participating in Chapter 61 Tax Relief Program

Field name	Data type	Allow nulls	Default value	Domain	Precision	Scale	Length	Description
OBJECTID	Object ID							
Shape	Geometry	Yes						
TOWN_ID	Short integer	No		Town_ID1	3			Unique code identifying the MA Town the polygon resides within.
POLY_ID	Long integer	No			5			Unique code within a town to tag each polygon.
LOC_ID	String	Yes					15	Link to MassGIS Standard Parcel data (LOC_ID).
FEE_OWNER	String	Yes					100	Owner of the land represented by the polygon (Pays taxes).
ABRV_FEE_OWNER	String	Yes		OS_Type			20	Abbreviation of FEE_OWNER kept in OSNAMES table.
TYPE_FEE_OWNER	String	No					1	Code specifying the classification of FEE_OWNER.
MANAGER	String	Yes					100	Manager of the property (only if different from FEE_OWNER).
ABRV_MANAGER	String	Yes		OS_Type			20	Abbreviation of MANAGER kept in OSNAMES table.
TYPE_MANAGER	String	Yes					1	Code specifying the classification of MANAGER.
OTHER_1	String	Yes					100	Entity holding INT_1 on the property.
ABRV_OTHER_1	String	Yes					20	Abbreviation of OTHER_1 kept in OSNAMES table.
INT_1	String	Yes		OS_Interest_Type			20	Code specifying the type of interest held by OTHER_1.
TYPE_1	String	Yes		OS_Type			1	Code specifying the classification of OTHER_1.
SITE_NAME	String	Yes					120	Name of the site (May span multiple polygons).
GIS_ACRES	Double	No	0		10	4		Acreage of polygon as calculated by GIS.
ASSESS_ACRES	Double	No	0		10	4		Acreage of polygon according to local assessor.
DEED_ACRES	Double	No	0		10	4		Acreage of polygon as recorded in deed.
PROJ_ID1	String	Yes					20	ID code for parcel (state use only).
CAL_DATE_REC	Date	Yes			0	0	8	Date last alteration to deed was recorded.
PRIMARY_PURP	String	No		OS_Primary_Purpose			1	Code for why the land was protected/improved.
PUB_ACCESS	String	No	N	OS_Public_Access			1	Code for legal (not physical) level of public access to parcel.
CH61_PROG	String	Yes		OS_Chapter61			1	Code for type of Chapter 61 program parcel uses.
DOR_CODE	Short integer	Yes		OS_DOR_Class	3			Use code for Chapter 61 land as determined by DOR.
OS_DEED_BOOK	Long integer	Yes			6			The book that the deed was recorded in on CAL_DATE_REC.
OS_DEED_PAGE	Long integer	Yes			5			The page of OS_DEED_BOOK that the deed was recorded in.
ASSESS_MAP	String	Yes					10	Local Assessor's Map.
ASSESS_BLOCK	String	Yes					10	Local Assessor's Block.
ASSESS_LOT	String	Yes					10	Local Assessor's Lot.
ASSESS_SUBLOT	String	Yes					10	Local Assessor's Sublot.
BASE_MAP	String	Yes					10	Recompilation map name/type.
SOURCE_MAP	String	Yes					50	Source map used to enter linework/attributes.
SOURCE_TYPE	String	Yes		OS_Source			10	Code for type of data source.
COMMENTS	String	Yes					255	Any further explanatory comment.
ATT_DATE	Date	Yes			0	0	8	Date attributes were last modified.
CH61_ID	String	No					9	Unique ID for feature class ([TOWN_ID]-[POLY_ID]).
Shape_Length	Double	Yes			0	0		
Shape_Area	Double	Yes			0	0		

Simple feature class OPENSPACE_POLY
Geometry: Polygon — Contains M values: No — Contains Z values: No

All Protected and Recreational Open Space in Massachusetts

Field name	Data type	Allow nulls	Default value	Domain	Precision	Scale	Length	Description
OBJECTID	Object ID							
Shape	Geometry	Yes						
TOWN_ID	Short integer	No		Town_ID1	3			Unique code identifying the MA Town the polygon resides within.
POLY_ID	Long integer	No			5			Unique code within a town to tag each polygon.
LOC_ID	String	Yes					15	Link to MassGIS Standard Parcel data (LOC_ID).
DCAM_ID	Long integer	Yes			7			Link to DCAM tables of state-owned land (ARCID).
FEE_OWNER	String	No					100	Owner of the land represented by the polygon (Pays taxes).
ABRV_FEE_OWNER	String	Yes		OS_Type			20	Abbreviation of FEE_OWNER kept in OSNAMES table.
TYPE_FEE_OWNER	String	Yes					1	Code specifying the classification of FEE_OWNER.
MANAGER	String	Yes					100	Manager of the property (only if different from FEE_OWNER).
ABRV_MANAGER	String	Yes		OS_Type			20	Abbreviation of MANAGER kept in OSNAMES table.
TYPE_MANAGER	String	Yes					1	Code specifying the classification of MANAGER.
OTHER_1	String	Yes					100	Entity holding INT_1 on the property.
ABRV_OTHER_1	String	Yes					20	Abbreviation of OTHER_1 kept in OSNAMES table.
INT_1	String	Yes		OS_Interest_Type			20	Code specifying the type of interest held by OTHER_1.
TYPE_1	String	Yes		OS_Type			1	Code specifying the classification of OTHER_1.
OTHER_2	String	Yes					100	Entity holding INT_2 on the property.
ABRV_OTHER_2	String	Yes					20	Abbreviation of OTHER_2 kept in OSNAMES table.
INT_2	String	Yes		OS_Interest_Type			20	Code specifying the type of interest held by OTHER_2.
TYPE_2	String	Yes		OS_Type			1	Code specifying the classification of the OTHER_2.
OTHER_3	String	Yes					100	Entity holding INT_3 on the property.
ABRV_OTHER_3	String	Yes					20	Abbreviation of OTHER_3 kept in OSNAMES table.
INT_3	String	Yes		OS_Interest_Type			20	Code specifying the type of interest held by OTHER_3.
TYPE_3	String	Yes		OS_Type			1	Code specifying the classification of the OTHER_3.
GRANTPROG1	String	Yes		OS_Projects			20	Code specifying what grant program was used on this property.
GRANTTYPE1	String	Yes		OS_Type			1	Code specifying the classification of the GRANTPROG1.
GRANTPROG2	String	Yes		OS_Projects			20	Code specifying what grant program was used on this property.
GRANTTYPE2	String	Yes		OS_Type			1	Code specifying the classification of the GRANTPROG1.
SITE_NAME	String	Yes					120	Name of the site (May span multiple polygons).
GIS_ACRES	Double	No	0		10	4		Acreage of polygon as calculated by GIS.
ASSESS_ACRES	Double	No	0		10	4		Acreage of polygon according to local assessor.
DEED_ACRES	Double	No	0		10	4		Acreage of polygon as recorded in deed.
PROJ_ID1	String	Yes					20	ID code for parcel (state use only).
PROJ_ID2	String	Yes					20	Second ID code for parcel (state use only).
PROJ_ID3	String	Yes					20	Third ID code for parcel (state use only).
FY_FUNDING	Short integer	Yes		FiscalYear	4			Fiscal Year project was completed (state use only).
CAL_DATE_REC	Date	Yes			0	0	8	Date last alteration to deed was recorded.
BOND_ACCT	String	Yes					20	Bond account used for project/polygon (state use only).
PRIMARY_PURP	String	No	X	OS_Primary_Purpose			1	Code for why the land was protected/improved.
PUB_ACCESS	String	No	N	OS_Public_Access			1	Code for legal (not physical) level of public access to parcel.
LEV_PROT	String	No		OS_Level_Protection			1	Code for the level of protection upon the parcel.
ARTICLE97	Short integer	No		BooleanSymbolValue	1			Is the parcel protected under Article 97 of MA Constit.
EOEAINVOLV	Short integer	No	0	OS_EOEA_Inv	1			Code for level of EOEA agency involvement.
OS_DEED_BOOK	Long integer	Yes			6			The book that the deed was recorded in on CAL_DATE_REC.
OS_DEED_PAGE	Long integer	Yes			5			The page of OS_DEED_BOOK that the deed was recorded in.
ASSESS_MAP	String	Yes					10	Local Assessor's Map.
ASSESS_BLOCK	String	Yes					10	Local Assessor's Block.
ASSESS_LOT	String	Yes					10	Local Assessor's Lot.
ASSESS_SUBLOT	String	Yes					10	Local Assessor's Sublot.
BASE_MAP	String	Yes					10	Recompilation map name/type.
SOURCE_MAP	String	Yes					50	Source map used to enter linework/attributes.
SOURCE_TYPE	String	No		OS_Source			10	Code for type of data source.
COMMENTS	String	Yes					255	Any further explanatory comment.
ATT_DATE	Date	Yes			0	0	8	Date attributes were last modified.
FEESYM	String	Yes					20	Code for mapping ownership.
INTSYM	String	Yes					20	Code for mapping interests.
OS_ID	String	No					9	Unique ID for feature class ([TOWN_ID]-[POLY_ID]).
Shape_Length	Double	Yes			0	0		
Shape_Area	Double	Yes			0	0		

Simple feature class OS_ARC
Geometry: Polyline — Contains M values: No — Contains Z values: No

Arcs that bound all OpenSpace and Chapter61 polygons

Field name	Data type	Allow nulls	Default value	Domain	Precision	Scale	Length	Description
OBJECTID	Object ID							
Shape	Geometry	Yes						
CODE	Short integer	No	0	OS_Arc_Code	2			Feature arc is coincident with
SOURCE_TYPE	String	No	X	OS_Source			10	Where the arc come from
ARC_DATE	Date	No	1/1/1901		0	0	8	Date of last edit to arc geometry
COMMENTS	String	Yes					10	Any further explanatory comment.
DROPLINE	String	Yes					10	Symbolization code for dropping line within sites
ARCSYM	String	No	B	OS_ArcSym			2	Field to query out OS or Ch61 arcs
Shape_Length	Double	Yes			0	0		

Table OSNAMES

Table listing all abbreviations used in OpenSpace - used for populating attribute editing form.

Field name	Data type	Allow nulls	Default value	Domain	Precision	Scale	Length	Description
OBJECTID	Object ID							
AGENCY	String	Yes					100	Full text of entity's name.
ABBREV	String	Yes					8	Abbreviation of entity.
DEPT	String	Yes					8	Internal table reference between MANAGER & FEE_OWNER.
SFO	String	Yes		OS_Type			1	Code specifying the classification of entity.

Coded value domains

OS_Arc_Code — Description — Field type: *Short integer* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
0	Unknown
1	Town Boundary
2	Road
3	Streambank
4	Lake Shoreline
5	Coastline
6	Railroad Line
7	Road or Railroad Right-of-Way
8	Utility Right-of-Way
9	Unsure if coincident

OS_ArcSym — Description — Field type: *String* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
61	Chapter61_Poly Arc
B	Both
OS	OpenSpace_Poly Arc

OS_Chapter61 — Description — Field type: *String* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
Y	Chapter 61 - Forestry
A	Chapter 61 - Agriculture
F	Chapter 61 - Forestry
B	Chapter 61 - Recreation

OS_DOR_Class — Description — Field type: *Long integer* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
601	Forestry
710	Cranberry Bog
711	Tobacco Sod
712	Truck Crops
713	Field Crops
714	Orchards
715	Grape Vineyards
716	Tillable Forage Cropland
717	Productive Woodland
718	Pasture
719	Nurseries
720	Related Farm Land
722	Non-arable Farm Land
801	Hiking
802	Camping
803	Nature Study
804	Boating
805	Golfing
806	Equestrian
807	Hunting
808	Fishing
809	Alpine Skiing
810	Nordic Skiing
811	Swimming Areas
812	Picnic Areas
813	Gliding/Hang-gliding
814	Target Shooting

OS_Source — Description — Field type: *String* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
V	Volunteer on 25K base
AS	GeoReferenced Assessor's Map
RP	GeoReferenced Plan
NP	Digital Parcels (non-standard)
P1	Digital Parcels - Level I
P2	Digital Parcels - Level II
P3	Digital Parcels - Level III
O	1/2 meter Orthoimage
OO	Other Orthoimage
GS	USGS Topo
GP	GPS Survey
SV	Survey
CS	COGO from survey
CD	COGO from deed
DD	Deed Description
OM	Other Map (See Comments field)
MHD_TWNBND	Legislated Massachusetts Town Boundary
X	Unknown

OS_Type — Description — Field type: *String* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
F	Federal
S	State
C	County
M	Municipal
B	Public Non-Profit
L	Land Trust
G	Conservation Organization
N	Private Non-Profit
P	Private
O	Other
I	Inholding
1	State vs. State Dispute
2	State vs. Non-Profit Dispute
3	State vs. Municipality Dispute
4	State vs. Private Dispute

OS_Interest_Type — Description — Field type: *Short integer* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
CR	Conservation Restriction
APR	Agricultural Preservation Restriction
CAPR	Conservation / Agricultural Preservation Restriction
AQR	Aquifer Protection
HPR	Historic Preservation Restriction
EASE	Easement (Official Restriction Only)
WR	Watershed Restriction
WRP	Wetlands Restriction Program
ROW	Right-of-Way
LH	Lease Holding
DR	Deed Restriction
LIC	License

OS_Level_Protection — Description — Field type: *String* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
P	Perpetuity
T	Term Limited
L	Limited
N	None
X	Unknown

OS_Primary_Purpose — Description — Field type: *String* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
A	Agriculture
B	Recreation and Conservation
C	Conservation
F	Flood Control
H	Historical/Cultural
O	Other
Q	Habitat
R	Recreation
S	Scenic (Official Designation Only)
U	Underwater
W	Water Supply
X	Unknown

OS_Projects — Description — Field type: *String* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
SH	Self Help
USH	Urban Self Help
LWCF	Land and Water Conservation Fund
CPA	Community Preservation Act
SURF	Strategic Urban Recreation Facilities
CP	Conservation Partnership
ALA	Aquifer Land Acquisition
DWSP	Drinking Water Supply Protection

OS_Public_Access — Description — Field type: *String* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
Y	Full Public Access
N	No Public Access
L	Limited Public Access
X	Unknown

Town_ID1 — Description — Field type: *Short integer* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
1	Town of Abington
2	Town of Acton
3	Town of Acushnet
4	Town of Adams
⋮	⋮
348	City of Worcester
349	Town of Worthington
350	Town of Wrentham
351	Town of Yarmouth

OS_EOEA_Inv — Description — Field type: *Short integer* — Split policy: *Default value* — Merge policy: *Default value*

Code	Description
1	State funds were used in protecting this parcel.
2	State agencies were involved, but no funds were used.

The MassGIS Protected & Recreational OpenSpace DataLayer is owned and maintained by MassGIS. This schema was developed by MassGIS with the assistance of EOEA agency staff. Any questions should be forwarded to Scott Costello, MassGIS OpenSpace DBA [scott.costello@state.ma.us] (617)-626-1076.